

REMARKS

Claims 1-31 are pending in the reissue application. Claims 1, 16-17, 21 and 25 are independent claims. Supplemental to Applicants' Amendment filed on June 4, 2003, claims 17-20, 25 and 29-31 have been amended in several particulars for purposes of clarity, brevity and accuracy, and to further avoid the recapture rule as previously presented in the Amendment filed on June 4, 2003. For example:

Independent claim 17 has been amended to define a display device comprising:

a display panel having a plurality of columns and a plurality of rows for displaying an image in accordance with display data; and
a data driver coupled to said display panel, said data driver being arranged on a single side of said display panel, said data driver having an input terminal and a plurality of output terminals, each of said output terminals corresponding to each of at least a part of said columns of said display panel, said data driver including:

a generator for generating a plurality of display voltages, **said display voltages including a set of positive and negative polarity gray scale voltages corresponding to each of gray scales,**

a selector for selecting one of said plurality of display voltages **in accordance with each of said display data and a horizontal position of each of said output terminals corresponding to each of said display data,** and

an output circuit for outputting said selected one of said display voltages to said each of said output terminals;

wherein selected display voltages which correspond to adjacent two of said output terminals have different polarity from each other.

Similarly, independent claim 21 has previously amended to only define a data driver for coupling to a display panel, having a plurality of columns and a plurality of rows for displaying an image in accordance with display data, said data driver being arranged on a single side of said display panel, and comprising:

a generator for generating a plurality of display voltages, **said**

display voltages including a set of positive and negative polarity gray scale voltages corresponding to each of gray scales;
a selector for selecting one of said plurality of display voltages in accordance with each of said display data and a horizontal position of each of said output terminals corresponding to each of said display data; and
an output circuit for outputting said selected one of said display voltages to said each of said output terminals;
wherein selected display voltages which correspond to adjacent two of said output terminals have different polarity from each other.

As expressly defined in base claims 17 and 21, the display voltages have now been defined to include a newly added limitation such as “including a set of positive and negative polarity gray scale voltages corresponding to each of gray scales.” The selection of one of the display voltages has now been defined to include a newly added limitation such as “in accordance with each of said display data and a horizontal position of each of said output terminals corresponding to each of said display data.” In addition, selected display voltages have been added to correspond to adjacent two of said output terminals have different polarity.

These newly added narrowing limitations in the reissue claims 17 and 21 are **not** defined anywhere in each of the original base claims 1, 11 and 16 of U.S. Patent No. 5,774,106, and modify the claims such that the scope of the claims no longer results in a recapture of the alleged surrendered subject matter.

Alternatively, independent process claim 25 has previously amended to define a method of applying display voltages to a display panel that is different in scope of coverage from that of original process claim 16 of U.S. Patent No. 5,774,106. For example, claim 25 defines a method of applying display voltages to a display panel, having a plurality of columns and a plurality of rows for display an image in accordance with display data, and comprising the steps of:

providing an input terminal and a plurality of output terminals, said output terminals being coupled to said display panel, said output terminals being arranged on a single side of said display panel, each of said output terminals corresponding to each of at least a part of said columns of said display panel;
generating a plurality of display voltages, said display voltages including a set of positive and negative polarity gray scale voltages corresponding to each of gray scales;
selecting one of said plurality of display voltages in accordance with each of said display data and a horizontal position of each of said output terminals corresponding to each of said display data;
and
outputting said selected one of said display voltages to said each of said output terminals, thereby applying said selected one of said display voltages to said liquid crystal panel;
wherein selected display voltages which correspond to adjacent two of said output terminals have different polarity from each other.

Again, as expressly defined in base claims 25, the display panel has now been defined to include a newly added limitation such as “plurality of columns and a plurality of rows” and provided with “an input terminal and a plurality of output terminals, said output terminals being coupled to said display panel ... arranged on a single side of said display panel, each of said output terminals corresponding to each of at least a part of said columns of said display panel.”

The display voltages have now been defined to include a newly added limitation such as “including a set of positive and negative polarity gray scale voltages corresponding to each of gray scales.” The selection of one of the display voltages has now been defined to include a newly added limitation such as “in accordance with each of said display data and a horizontal position of each of said output terminals corresponding to each of said display data.” In addition, two of said selected one of said display voltages have been added to correspond to adjacent two of said output terminals have different polarity.

Again, these newly added narrowing limitations in the reissue claim 25 are **not** defined anywhere in each of the original base claims 1, 11 and 16 of U.S. Patent No. 5,774,106, and modify the claim such that the scope of the claim no longer results in a recapture of the alleged surrendered subject matter.

In view of the foregoing explanations and distinctions between the subject matter of newly added base claims 17, 21 and 25 relative to the original base claims 1, 11 and 16 of U.S. Patent No. 5,774,106, Applicants respectfully request that the rejection of claims 17-28 under 35 USC 251 be withdrawn.

In view of the foregoing amendments, arguments and remarks, all claims 1-31 are deemed to be allowable and this application is believed to be in condition to be passed to issue. Should any questions remain unresolved, the Examiner is requested to telephone Applicants' attorney at the Washington DC area office at (703) 312-6600.

INTERVIEW:

In the interest of expediting prosecution of the present application, Applicants respectfully request that an Examiner interview be scheduled and conducted. In accordance with such interview request, Applicants respectfully request that the Examiner, after review of the present Amendment, contact the undersigned local Washington, D.C. area attorney at the local Washington, D.C. telephone number (703) 312-6600 for scheduling an Examiner interview, or alternatively, refrain from issuing a further action in the above-identified application as the undersigned attorneys will be telephoning the Examiner shortly after the filing date of this Amendment in order to schedule an Examiner interview. Applicants thank the Examiner in advance for such considerations. In the event that this Amendment, in and of itself, is sufficient to place the application in condition for allowance, no

Examiner interview may be necessary.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, or any extension of time fees, or credit any overpayment of fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (500.33793R00).

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP


Hung H. Bui
Registration No. 40,415

HHB
(703) 312-6600